

margins bristle with their projecting ends, as in fig. 19. The test frequently attains a large size, and may be said to range from  $\frac{1}{25}$ th to  $\frac{1}{8}$ th inch (1 to 4 mm.) in length.

*Verneuilina triquetra* is by no means common in the living condition. The finest Challenger specimens are from Stations 24, off Culebra Island, West Indies, 390 fathoms; smaller but characteristic examples occur in two soundings off Kandavu, Fiji Islands, at depths of 210 fathoms, and 255 fathoms respectively. The species is excellently figured by Bailey, from specimens dredged on the coast of North America, south-east of New York, 89 fathoms.

It is well known as a Cretaceous fossil, having been found in the Chalk of the south-east of England (Ehrenberg, Eley, Parker and Jones), and of Bohemia (Reuss). It occurs also in the Tertiary Sands of North Germany (Römer).

*Verneuilina spinulosa*, Reuss (Pl. XLVII. figs. 1-3).

- Verneuilina spinulosa*, Reuss, 1849, Denkschr. d. k. Akad. Wiss. Wien, vol. i. p. 347, pl. xlvii. fig. 12, a.-c.  
 „ *spinosissima*, Costa, 1856, Atti dell' Accad. Pont., vol. vii. p. 263, pl. xxiii. fig. 5, A. C.  
 „ *spinulosa*, Egger, 1857, Neues Jahrb. für Min. &c., p. 292, pl. ix. figs. 17, 18.  
 „ „ Brady, 1870, Ann. and Mag. Nat. Hist., ser. 4, vol. vi. p. 301, pl. xii. fig. 6, a.-c.

This is a tricarinate species, in which the marginal angle of each segment terminates in a projecting spine, the point of which is directed towards the aboral end of the test. The shell is broadest near the oral end, and tapers to a point at the opposite extremity; it is calcareous and hyaline, and generally conspicuously perforated.

In the living condition, *Verneuilina spinulosa* is best known as a tropical or sub-tropical shallow-water form. In the Atlantic it is exceedingly rare. Isolated specimens have been collected, both by Mr. Siddall and myself, on our own shores, and it has been dredged off Bermuda, at a depth of 435 fathoms, but it has not been noticed elsewhere in the North Atlantic; and south of the Equator it appears to be equally scarce, the single recorded locality being Station 122, south-east of Pernambuco, 350 fathoms. It has been observed in the Mediterranean, in the Red Sea, and on the coast of Mauritius and Ceylon; at twelve Stations in the South Pacific, 12 fathoms to 1100 fathoms; and at four in the North Pacific, 7 fathoms to 2300 fathoms. The greater depths referred to are quite exceptional; in a list comprising twenty-four localities only seven exceed 100 fathoms.

As a fossil this species has been obtained from the Chalk of the south-east of England (Ehrenberg, *vide*, Parker & Jones), from the Miocene formations of Austria (Reuss, Karrer), of Bavaria (Egger), and of Malta (Brady); from the Pliocene of Italy (Costa, Parker and Jones), and of Spain (Parker and Jones); and from the Post-tertiary beds of the Island of Ischia (Vanden Broeck).